What Do People Really Think of When They Claim to Believe in Repressed Memory?

Methodological Middle Ground and Applied Issues

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Abstract

What do people really think of when they declare to believe in repressed memory? In two studies ($N_{\text{Study 1}} = 3158$; $N_{\text{Study 2}} = 305$) using an integrative methodology considering recent methodological discussions, we found that most participants reported to believe in repressed memory. They also appeared to think of an unconscious mechanism when reporting beliefs in repression, whereas they were more sceptical about deliberate memory suppression. Participants with no memory of childhood abuse expressed more scepticism about unconscious and deliberate mechanisms than those with such memories (Study 1). The order in which the items were presented was not associated with beliefs in the different statements (Study 2). The results are discussed along the lines of survey methodology, which is to what degree are findings about the general public's beliefs in repression dependent on the questions asked and on design features. Applied issues are also discussed.

Keywords: Repressed memory; Recovered memory; Belief; Childhood abuse; Survey method

In the 1990's, in the U.S., the 'memory wars' took place. These involved debates, which occurred in academia, courtrooms, and in the clinical field, and saw two sides confronting each other. On the one hand, there were those who were convinced that individuals can unconsciously repress traumatic memories, thus becoming inaccessible to retrieval, before recovering them accurately sometimes years later. On the other hand, sceptics considered that traumatic memories are generally very well remembered, and that unconscious repression lacked scientific evidence (See Ost, 2003, for a complete and balanced overview of the 'memory wars' history). Recently, it has been argued that these debates are not over, and that the term 'repressed memory' has since been replaced by 'dissociative amnesia' (Otgaar et al., 2019).

One of the reasons why these debates would not be over is that the belief in the existence of repression is still alive in the 21st century among both clinicians, therapists and the general public (e.g., Ost, Easton, Hope, French, & Wright, 2017; Ost, Wright, Easton, Hope, & French, 2013; Otgaar et al., 2019; Patihis, Ho, Tingen, Lilienfeld, & Loftus, 2014), while memory researchers are still mostly sceptical about the existence of this phenomenon (Patihis et al., 2014; Patihis, Ho, Loftus, & Herrera, 2018). The public's beliefs about repressed memories have implications at several levels: for example, accepting the possibility of having repressed memories could facilitate the engagement of patients in therapy dedicated to recovering such memories. Jury members in court convinced that childhood abuse memories can be repressed could lead to a conviction of a defendant on this basis without considering the possibility of false memories. It is then important to explore the general public's beliefs about this controversial concept to estimate educational needs.

Recently, discussions have emerged regarding appropriate methodologies to explore beliefs about repression (Brewin et al., 2019). It has been argued that how survey participants were asked questions in past studies does not provide accurate access to what they really

believe. Brewin et al. (2019) proposed to participants an original statement on repression (i.e., “Traumatic experiences can be repressed for many years and then recovered”) as well as an alternative statement describing the phenomenon of memory suppression, that involves a voluntary memory avoidance mechanism (i.e., “Traumatic experiences can be deliberately blocked for many years and then recovered”). Finding similar percentages of agreement with these two statements (i.e., repression statement: 76%, $n = 122$; memory suppression statement: 74%, $n = 119$), the authors assumed that when individuals state that they believe in repression, they do not think of an *unconscious* mechanism, but instead of a *deliberate* one.

Otgaar and colleagues (in press) criticized the method used by pointing out the absence of a statement that included the unconscious nature of repressed memory. They proposed a different statement to three groups of participants: the repression statement (Group 1), the memory suppression statement (Group 2), and the unconscious repression statement (Group 3). They found similar percentages of agreement between the three statements (i.e., Study 1, repression statement: 72%, $n = 54$; memory suppression statement: 70%, $n = 55$; unconscious repression statement: 59%, $n = 45$; Study 2: unconscious repression statement: 67%, $n = 53$), suggesting that people do endorse the idea of an unconscious repression mechanism.

Study 1

Otgaar et al. (in press) used a between-subject design to avoid any order-of-statement effect, consistent with the limitation raised by Brewin et al. (2019) who had used a within-subject design. Such a choice has of course limited any order effect, but also limits the interpretation of the results to differences between groups, and is unlikely to reveal at an individual level what people mean by “repression”. Thus, in an attempt to find methodological middle ground, we wanted to explore the levels of the general public endorsement to the three statements at a within-subject level.

We also sought to explore the links between the different types of memories that people may have of childhood abuse (i.e., no memories, continuous memories, recovered memories, and ongoing memories but later reinterpreted as abuse) and levels of endorsement of the concept of repression. Indeed, people who remember childhood abuse may feel more involved in the issue of traumatic memories, especially people who have recovered such memories, since the concept of repression is intrinsically related to childhood trauma (cf. the memory wars, or the Freudian origins of the repressed memory hypothesis, Freud, 1893–1895/1953).

Method

Participants

We retrieved unpublished data from a larger French-language questionnaire conducted in December 2019 devoted to explore the prevalence of recovered and continuous memories of child abuse in the general public. Participants were recruited using online social networks (i.e., Twitter and Facebook). Initially, 5044 adults began to complete the questionnaire. We pre-excluded 1585 participants who answered only questions related to age, gender or education level, 16 participants who reported lying about their age to participate in the study, and 97 participants who reported responding so inattentively that we could exclude their responses from the analyses. Note that this decision to exclude participants was made a priori from the data collection and analyses. Because the items for which we present the analyses in the present article were at the end of the questionnaire, 188 additional participants had stopped completing the questionnaire beforehand. Thus, our sample population consisted of 3158 participants, with a mean age of 34.4 years old ($SD = 11.2$, median 33.0, range 18–75). In total, 52.3% ($n = 1653$) were female, 46.9% ($n = 1480$) were male, and 0.8% ($n = 25$) reported being of another gender (e.g., non-binary). In terms of educational level, 9.7% ($n = 307$) of the participants reported a high school degree, 13.4% ($n = 422$) reported a 2-year

university degree, 13.2% ($n = 417$) reported a 3-year university degree, 9.8% ($n = 310$) reported a 4-year university degree, 41.2% ($n = 1301$) a master's degree, 10.5% ($n = 333$) a Ph.D./M. D, and 2.2% ($n = 68$) reported another education level (e.g., vocational high school).

To explore the beliefs in repression, unconscious repression and memory suppression in the different groups of “memory of child abuse” participants, we initially asked the question "Have you ever recovered a memory of being abused as a child, when you had no previous memory of such abuse? Participants were given the option of answering “Yes”, “No”, or “I don't know/don't know for sure”. Thereafter, we asked them to specify what they really meant by their answer, to identify potential false positives and false negatives (see Dodier, Patihis, & Payoux, 2019). Thus, we were able to group the participants into five groups, with the following breakdown (see Supplementary Material for the exact wording of the follow-up questions): continuous memory of child abuse (7.7%, $n = 243$), continuous memories that were later reinterpreted as child abuse (13.4%, $n = 424$), recovered memories of child abuse that participants knew about before they remembered them (3.8%, $n = 120$), recovered memories of child abuse that participants did not know about before they remembered them (2.2%, $n = 70$), and no memories of child abuse (72.9%, $n = 2301$). It should be noted that participants had the opportunity at this stage to specify that even if they had recovered memories of childhood abuse, they did not wish to talk about it further. In total, 16 people preferred not to talk about it. These participants were therefore excluded from our analyses.

Material and Procedure

The questionnaire (in French) was developed and distributed on LimeSurvey©. The questionnaire began with an introductory sheet and the consent form, which stated, among other things, that the study was restricted to participants 18 years of age or older. Next, sociodemographic questions were asked (age, gender, level of education). This was followed

by a question on the memories recovered, immediately after which follow-up questions were asked to clarify what the participants meant by the answer given. Second, several questions were asked only to participants who reported recovering memories of childhood abuse that they did not know about before they remembered it. These data are not presented in this article and are the subject of a separate manuscript. Finally, questions about beliefs in repression were asked. We used the wordings of Brewin et al. (2019, Study 3) and Otgaar et al. (in press, Study 2), which we translated into French. The questions appeared one by one, on a separate sheet. The first question asked was about repression. The wording of the statement was as follows: “Traumatic experiences can be repressed for many years and then recovered”. The second question was about deliberate memory suppression and the statement was worded as follows: “Traumatic experiences can be deliberately blocked for many years and then recovered”. Finally, the third statement was as in Otgaar et al. (in press, Study 2): “Traumatic experiences can be unconsciously repressed for many years and then recovered”. For each statement, participants were allowed to choose among three response modalities: generally true, generally false, and I don’t know. Finally, questions about their real age and their rigour in answering the questionnaire were asked, before providing participants with a debriefing sheet and the opportunity to leave a comment.

Results

Analyses

Since we sought to compare adhesions to different statements at an intra-subject level, we adopted the procedure of Brewin et al. (2019). Thus, to conduct McNemar Tests, we computed new variables in order to make 2×2 comparisons, so that for each statement, we computed two variables : (1) one where the “Generally false” responses were combined with the “I don't know” responses, to compare this new proportion to the proportion of “Generally true” responses; (2) one where the “Generally true” responses were combined with the “I

don't know" responses, to compare this new proportion to the proportion of "Generally false" responses. All statistical analyses were performed using jamovi 1.1.9.0 (The jamovi project, 2019). We checked the analysis using Statcheck.io. All data are available at <https://osf.io/46zb2/>.

Comparisons of Endorsement and Rejection of the Different Statements

For the following presentation of the results, the different statements will be coded and presented as follows: repression = item 1; memory suppression = item 2; unconscious repression = item 3. In this subsection, all the tests presented are McNemar Tests. Percentages of the different response options and the raw data for the total sample are reported in Table 1. Percentages of the different response modalities and the raw data for the different categories of child abuse memories are reported in Table 2.

Total sample. We found that more participants responded that item 1 was true (70.7%) than they did for item 2 (54.3%), $\chi^2(1) = 341, p < .001$, and that more participants answered that item 2 was false (12.9%) than they did for item 1 (6.1%), $\chi^2(1) = 136, p < .001$. More participants responded that item 3 was true (73.1%) than they did for item 1 (70.7%), $\chi^2(1) = 21.7, p < .001$. However, we observed no difference in the number of "False" responses between item 1 (6.1%) and item 3 (5.9%), $\chi^2(1) = 0.744, p = .388$. Participants answered "True" more in item 3 (73.1%) than in item 2 (54.3%), $\chi^2(1) = 433, p < .001$. Finally, we observed more "False" responses in item 2 (12.9%) than in item 3 (5.9%), $\chi^2(1) = 142, p < .001$.

Table 1

Continuous memories of child abuse. More participants responded that item 1 was true (78.2%) than they did for item 2 (71.2%), $\chi^2(1) = 6.15, p = .013$. In contrast, more participants answered that item 2 was false (8.2%) than they did for item 1 (4.1%), $\chi^2(1) = 6.25, p = .012$. No difference was observed in "True" responses between item 1 (78.2%) and item 3 (80.7%),

$\chi^2(1) = 2.25, p = .134$. The same was observed for “False” responses between these two items (item 1: 4.1%; item 3: 4.5%), $\chi^2(1) = 0.143, p = .705$. Participants answered “True” more in item 3 (80.7%) than in item 2 (71.2%), $\chi^2(1) = 11.8, p < .001$. Finally, participants more often answered that item 2 was false (8.2%) than they did for item 3 (4.5%), $\chi^2(1) = 4.76, p = .029$.

Reinterpreted memories of child abuse. Participants more often answered that item 1 was true (75.5%) than they did for item 2 (59.4%), $\chi^2(1) = 40.6, p < .001$. Inversely, more participants answered “False” to item 2 (13.4%) than to item 1 (4.0%), $\chi^2(1) = 28.6, p < .001$. Participants answered “True” as much in item 3 (76.4%) as in item 1 (75.5%), $\chi^2(1) = 0.381, p = .537$. Similarly, we observed no difference in the number of “False” responses between item 1 (4.0%) and item 3 (4.0%), $\chi^2(1) = 0.00, p = 1.0$. More participants answered that item 3 was true (76.4%) than they did for item 2 (59.4%), $\chi^2(1) = 43.9, p < .001$. Finally, more participants answered that item 2 was false (13.4%) than they did for item 3 (4.0%), $\chi^2(1) = 28.6, p < .001$.

Previously known recovered memories of child abuse. Participants responded more that item 1 was true (80.8%) than they did for item 2 (67.5%), $\chi^2(1) = 9.14, p = .002$. However, we did not observe any difference in the number of “False” responses between item 1 (4.1%) and item 2 (8.3%), $\chi^2(1) = 2.78, p = .096$. Similarly, we observed no difference in “True” responses between item 1 (80.8%) and item 3 (80.8%), $\chi^2(1) = 0.00, p = 1.00$. We also observed no difference in the number of “False” responses between item 1 (4.1%) and item 3 (5.0%), $\chi^2(1) = 0.333, p = .564$. More participants responded that item 3 was true (80.8%) than they did for item 2 (67.5%), $\chi^2(1) = 8.53, p = .003$. Finally, we observed no difference in the number of “false” responses between item 2 (8.3%) and item 3 (5.0%), $\chi^2(1) = 1.33, p = .248$.

Previously unknown recovered memories of child abuse. Participants in this subgroup answered more that item 1 was true (74.3%) than they did for item 2 (45.7%), $\chi^2(1) = 16.7, p$

$< .001$. Conversely, more participants answered that item 2 was false (11.4%) than they did for item 1 (4.3%), $\chi^2(1) = 5.00, p = .025$. We did not observe any difference in the percentages of “True” responses between item 1 (74.3%) and item 3 (71.4%), $\chi^2(1) = 1.00, p = .317$. Similarly, we found no difference in the number of “False” responses between item 1 (4.3%) and item 3 (5.7%), $\chi^2(1) = 1.00, p = .317$. Participants answered more that item 3 was true (71.4%) than they did for item 2 (45.7%), $\chi^2(1) = 13.5, p < .001$. Finally, we found no difference in the number of “False” responses between item 2 (11.4%) and item 3 (5.7%), $\chi^2(1) = 2.67, p = .102$.

No memories of child abuse. More participants responded that item 1 was true (68.4%) than they did for item 2 (51.1%), $\chi^2(1) = 275, p < .001$. Conversely, more participants answered that item 2 was false (13.6%) than they did for item 1 (6.9%), $\chi^2(1) = 95.0, p < .001$. More participants answered that item 3 was true (71.4%) than they did for item 1 (68.4%), $\chi^2(1) = 23.8, p < .001$. However, we did not observe any difference in the number of “False” responses between item 1 (6.9%) and item 3 (6.4%), $\chi^2(1) = 2.12, p = .145$. More participants responded that item 3 was true (71.4%) than they did for item 2 (51.1%), $\chi^2(1) = 362, p < .001$. Finally, more participants indicated that item 2 was false (13.6%) than they did for item 3 (6.4%), $\chi^2(1) = 107, p < .001$.

Table 2

Comparison Between the Different Categories of Memories of Childhood Abuse

In view of the previous results showing a proximity in the agreement between the *repression statement* and the *unconscious repression statement*, but also a systematic difference between these two statements and the *memory suppression statement*, the following analyses were conducted only on agreement and disagreement with the *repression statement*. As reported in Table 3 most categories were more considered true than all other categories, with the exception of the categories “previously unknown recovered memories of child

abuse” (no significant difference), and “no memories of child abuse”. In the latter case, the “True” modality was significantly less frequent than in the other groups. It should also be noted that only in this group were participants more often responding “False” than all other participants. This suggests that in terms of endorsement of the repression statement, the latter group (i.e., “no memories of child abuse”) might pull down the entire sample. To check this, we conducted four Chi 2 tests. We then observed that: (1) by including the “no memories of child abuse” group ($N = 3158$), there was a significant difference in the percentages of “True” responses between the groups, $\chi^2(4) = 23.3, p < .001$, Cramer’s $V = .086$; (2) by including the “no memories of child abuse” group ($N = 3158$), there was no significant difference in the percentage of “False” responses between the groups, $\chi^2(4) = 8.44, p = .077, V = .052$; (3) by excluding the “no memories of child abuse” group ($N = 857$), there was no significant difference in the percentage of “False” responses between groups, $\chi^2(3) = 2.03, p = .567, V = .047$; (4) by excluding the “no memories of child abuse” group ($N = 857$), there was no significant difference in the percentage of “False” responses between groups, $\chi^2(3) = 0.02, p = .999, V = .004$.

Table 3

Since the main purpose of the questions asked to the participants was not to explore this particular issue when we conducted the whole survey in which they were included, we did not counterbalance the order in which they were presented. As acknowledged by Brewin et al. (2019) and Otgaar et al. (in press), an order effect could always influence the results. Thus, we also collected data from a new sample of the general public, this time by counterbalancing the order in which the statements were presented and randomly assigning participants to one of the six different orders.

Study 2

Method

Participants

To determine the sample size needed to perform our series of Chi 2 tests (the design of which was each time a 6 (order of items) $\times$ 3 (response modalities for each item) cross-tabulation), we used G*Power (Faul et al., 2007), with an expected medium effect size of $w = .30$, a power of .80, and $\alpha = .05$. This prior power analysis determined that we needed a sample of at least 181 participants. French participants were recruited using the online social media Twitter. Volunteers were asked to contact the first author of the study by e-mail to ensure a random and balanced distribution in the different groups. We collected responses from 305 participants. Their average age was 31.6 years ($SD = 10.1$, median 30.0, range 18–69). In total, 47.8% ($n = 146$) were female, 51.5% ($n = 157$) were male, and 0.7% ($n = 2$) were of another gender (e.g., non-binary).

Material and Procedure

The structure of the questionnaire and the procedure were similar to that of the Study 1 data collection. The only difference was that no questions regarding recovered memories were asked, and participants were randomly assigned to one of the six conditions (see Table 4). Since the statements were very similar in wording, we also told them that they should read them carefully to avoid any confusion. This survey was conducted in April 2020.

Results

All statistical analyses were performed using jamovi 1.1.9.0 (The jamovi project, 2019). We checked the analysis using Statcheck.io. All data are available at <https://osf.io/46zb2/>. As in Study 1, the different statements will be coded and presented as follows: repression = item 1; memory suppression = item 2; unconscious repression = item 3. The different orders, percentages and raw data are presented in Table 3. The “True” responses to item 1 ranged from 69.6% (order item 3, 2, 1) to 75.0% (order item 2, 3, 1). For item 2, it

was from 47.8% (order 3, 2, 1) to 66.0% (order 2, 1, 3). Finally, the range of “True” responses to item 3 was from 66.0% (order item 1, 3, 2) to 78.9% (order item 1, 2, 3).

Three Chi 2 tests showed that the order of presentation of the three statements was not associated with the responses given by the participants to item 1, $\chi^2(10) = 3.35, p = .972, V = .07$, item 2, $\chi^2(10) = 11.0, p = .354, V = .14$, and item 3, $\chi^2(10) = 4.62, p = .915, V = .09$.

Table 4

General Discussion

In two studies, we found a strong endorsement of French general public samples for repressed memory. Besides, we showed that when they reported believing in repressed memory, they seemed to view it as an unconscious phenomenon, whereas they seemed more sceptical of the phenomenon of deliberately suppressed unpleasant memories. Finally, we showed equivalent levels of belief in all statements (repression, memory suppression, unconscious repression) among all groups of participants who reported having childhood abuse memories (continuous, recovered, reinterpreted). Only the group of participants reporting none were more sceptical on all statements.

The main interest of this study was to reach a middle ground in how to study individuals' beliefs about repressed memory. In two previous research, researchers expressed disagreement on how questions should be asked to participants. Brewin and colleagues (2019) insisted on asking alternative statements (repression and memory suppression) at a within-subject level, whereas Otgaar and colleagues (in press) considered that an alternative (unconscious repression) among the statements was missing, and that the within-subject level could bias the outcomes of the study because previous questions could influence the answers to subsequent questions. Note that both sides agreed that the alternative order of presentation of the statements could have an impact on the answers given. By combining the within-subject design with the three statements (repression, memory suppression, unconscious

repression; Study 1 and 2), while controlling for the order of the questions (Study 2), we believe that we have proposed designs that combines the strengths of the two cited studies, while reducing the weaknesses.

As in Otgaar et al. (in press), our results negate the interpretation of Brewin et al. (2019) that individuals' belief in repressed memory is based on a deliberate view of repression. We even show that the “unconscious repression” statement generated more endorsement than both the “repression” and “memory suppression” statements. Our findings contribute to the international literature highlighting the socially shared and controversial belief that humans can (unconsciously) repress traumatic memories (e.g., India: Patihis et al., 2014; Italy: Mirandola, Ferruzza, Cornoldi, & Magnussen, 2013; The Netherlands: e.g., Merckelbach & Wessel, 1998; Norway: Magnussen et al., 2006; UK: e.g., Ost et al., 2017; US: e.g., Patihis et al., 2014; Wake, Green, & Zajac, 2020).

In Study 2, we provided evidence that a within-subject design may not be a limitation as no order effects were observed on the responses given by participants. If our results are replicated in future studies, to clarify people's beliefs about memory functioning in future research, we can thus recommend (1) the use of within-subject designs when comparing beliefs in several alternative statements, and (2) to systematize the counterbalancing of the order in which statements are presented to participants. Finally, we believe that regardless of whether belief in repressed memories is used as a dependent or independent variable, it would be prudent to offer all three statements to ensure researchers that participants do believe in *unconscious* repressed memories, if this is part of their study's purpose.

Several applied issues should be addressed. We showed in Study 1 that people reporting childhood abuse memories generally endorse more the concept of repressed memory than those who do not report such memories. Research has well established that being abused as a child has long-term consequences on the mental health of victims (e.g.,

Springer, Sheridan, Kuo, & Carne, 2003). Also, belief in the possibility of forgetting childhood abuse has been shown to be positively associated with considering therapy (Rubin & Boals, 2010). Participants who report having memories (recovered, continuous or reinterpreted) and who believe in the possibility of repressing traumatic memories could therefore begin therapy with the goal of perhaps recovering others.

It is because patients and clinicians have embraced this belief in repressed memory that memory wars have occurred in the U.S. (see Ost, 2003). In France, 6% of people who are or have been in therapy reported recovering memories of childhood abuse during therapy (Dodier et al., 2019). Besides, belief in the effectiveness of therapeutic methods to recover memories was strongly associated with reporting memory recovery. In the U.S., 11% of those in therapy reported recovering memories during therapy (Patihis & Pendergrast, 2019). The main problem is that the methods therapists use to help patients recover memories are generally suggestive. Yet, studies show that such suggestive methods can generate false memories in about 30% of people (Scoboria et al., 2017). Research has also shown that some people may develop false memories of childhood events as a result of non-suggestive interview methods (Ost, Foster, Costall, & Bull, 2005). The long-term consequences of believing in repressed memory could therefore be both clinical (e.g., development of trauma based on false memories) and legal (e.g., conviction of innocent people in cases where charges were based solely on false recovered memories of child abuse). Our findings therefore plead in favour of the intervention of memory experts (which French court experts do not seem to be; Dodier, Melinder, Otgaar, Payoux, & Magnussen, 2019) in cases involving recovered memories.

As a cautionary concluding note, we conducted this research in France, a country with a history of psychology closely tied to psychoanalysis. For example, psychoanalysis is taught in high school in philosophy classes, and the issue of Freudian repressed memory is included

in the high school curriculum (see Dodier, 2018, for more details on the relation between France and psychoanalysis). This is probably why we found high percentages of agreement with “repression” and “unconscious repression” statements, and lower percentages of agreement with the deliberately suppressed memory statement. However, since psychoanalysis may be a French specificity, our results cannot be generalized to all countries. Future research would benefit from investigating this question by replicating the integrative designs in different countries.

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Table 1. Percentages (and raw values) of response options to the three statements

	Generally true	Generally False/I don't know	Generally False	Generally true/I don't know
Item 1	70.7 (2234)	29.6 (924)	6.1 (193)	93.9 (2965)
Item 2	54.3 (1714)	45.7 (1444)	12.9 (408)	87.1 (2750)
Item 3	73.1 (2310)	26.9 (848)	5.9 (185)	94.1 (2973)

Note. Item 1 = repression statement, item 2 = memory suppression statement, item 3 = unconscious repression statement

Table 2. Percentages (and raw values) of response options to the three statements according to the five child abuse memory categories

Type of child abuse memories		Generally true	Generally False/I don't know	Generally False	Generally true/I don't know
Continuous memories (<i>N</i> = 243)	Item 1	78.2 (190)	21.8 (53)	4.1 (10)	95.9 (233)
	Item 2	71.2 (173)	28.8 (70)	8.2 (20)	91.8 (223)
	Item 3	80.7 (196)	19.3 (47)	4.5 (11)	95.5 (232)
Reinterpretation of memories (<i>N</i> = 424)	Item 1	75.5 (320)	24.5 (104)	4.0 (17)	96.0 (407)
	Item 2	59.4 (252)	40.6 (172)	13.4 (57)	86.6 (367)
	Item 3	76.4 (324)	23.6 (100)	4.0 (17)	96.0 (407)
Previously known recovered memories (<i>N</i> = 120)	Item 1	80.8 (97)	19.2 (23)	4.2 (5)	95.8 (115)
	Item 2	67.5 (81)	32.5 (39)	8.3 (10)	91.7 (110)
	Item 3	80.8 (97)	19.2 (23)	5.0 (6)	95.0 (114)
Previously unknown recovered memories (<i>N</i> = 70)	Item 1	74.3 (52)	25.7 (18)	4.3 (3)	95.7 (67)
	Item 2	45.7 (32)	54.3 (38)	11.4 (8)	88.6 (62)
	Item 3	71.4 (50)	28.6 (20)	5.7 (4)	94.3 (66)
No memories (<i>N</i> = 2301)	Item 1	68.4 (1575)	31.6 (726)	6.9 (158)	93.1 (2143)
	Item 2	51.1 (1176)	48.9 (1125)	13.6 (313)	86.4 (1988)
	Item 3	71.4 (1643)	28.6 (658)	6.4 (147)	93.6 (2154)

Note. Item 1 = repression statement, item 2 = memory suppression statement, item 3 = unconscious repression statement

Table 3. Percentages (and raw values) and statistics from comparisons of "True" and "False" responses to the repression statement between the different categories of childhood abuse memories

Child abuse memory categories	Main group		Others		χ^2	<i>p</i>	<i>V</i>	Main group		Others		χ^2	<i>p</i>	<i>V</i>
	True	False/Don't know	True	False/Don't know				False	True/Don't know	False	True/Don't know			
Continuous memories	78.2 (190)	21.8 (53)	70.1 (2044)	29.9 (871)	7.06	.008	.047	4.1 (10)	95.9 (233)	6.3 (183)	93.7 (2732)	1.83	.176	.024
Reinterpretation of memories	75.5 (320)	24.5 (104)	70.0 (1914)	30.0 (820)	5.30	.021	.041	4.0 (17)	96.0 (407)	6.4 (176)	93.6 (2734)	3.77	.052	.035
Previously known recovered memories	80.8 (97)	19.2 (23)	70.3 (2137)	29.7 (901)	6.14	.013	.044	4.2 (5)	95.8 (115)	6.2 (188)	93.8 (2850)	0.82	.365	.016
Previously unknown recovered memories	74.3 (52)	25.7 (18)	70.7 (2182)	29.3 (906)	0.44	.510	.012	4.3 (3)	95.7 (67)	6.2 (190)	93.8 (2898)	0.42	.519	.012
No memories	68.4 (1575)	31.6 (726)	76.9 (659)	23.1 (198)	21.50	< .001	.083	6.9 (158)	93.1 (2143)	4.1 (35)	95.9 (822)	8.43	.004	.052

Note. Main group = group in the line corresponding to the values. Others = combination of the values of the remaining groups.

Table 4. Percentages (and raw values) of response options to the three statements according to their order of presentation

Order	Item 1			Item 2			Item 3		
	True	False	Don't know	True	False	Don't know	True	False	Don't know
Item 1, 2, 3 ($n = 57$)	71.9 (41)	8.8 (5)	19.3 (11)	56.1 (32)	19.3 (11)	24.6 (14)	78.9 (45)	8.8 (5)	12.3 (7)
Item 1, 3, 2 ($n = 50$)	70.0 (35)	14.0 (7)	16.0 (8)	52.0 (26)	22.0 (11)	26.0 (13)	66.0 (33)	14.0 (7)	20.0 (10)
Item 2, 1, 3 ($n = 50$)	74.0 (37)	10.0 (5)	16.0 (8)	66.0 (33)	10.0 (5)	24.0 (12)	72.0 (36)	8.0 (4)	20.0 (10)
Item 2, 3, 1 ($n = 48$)	75.0 (36)	10.4 (5)	14.6 (7)	56.3 (27)	12.5 (6)	31.3 (15)	75.0 (36)	10.4 (5)	14.6 (7)
Item 3, 1, 2 ($n = 54$)	74.1 (40)	5.6 (3)	20.4 (11)	38.9 (21)	24.1 (13)	37.0 (20)	77.8 (42)	5.6 (3)	16.7 (9)
Item 3, 2, 1 ($n = 46$)	69.6 (32)	8.7 (4)	21.7 (10)	47.8 (22)	17.4 (8)	34.8 (16)	71.7 (33)	8.7 (4)	19.6 (9)

Note: Item 1 = repression statement, item 2 = memory suppression statement, item 3 = unconscious repression statement